

**Protecting Infants against Hepatitis B Virus Infection when using
Pentacel® Vaccine during the Hib Vaccine Shortage**

The purpose of this document is to provide guidance about completing the HepB vaccine series in settings where DTaP-IPV/Hib (Pentacel®) is being used for the primary Hib series during the Hib vaccine shortage, taking into account the infant's mother's hepatitis B surface antigen (HBsAg) status and vaccine availability. **Providers using DTaP-IPV/Hib (Pentacel®) vaccine to protect infants against Hib disease should make every effort to have an adequate supply of monovalent HepB vaccine available to ensure all infants receive timely HepB vaccination and avoid excess doses of other antigens, e.g., DTaP**

Birth dose		
All infants should receive a dose of monovalent HepB vaccine at birth. ^{1,2} Monovalent HepB vaccine from either of the two United States manufacturers can be used for the birth dose. If the birth dose is delayed, monovalent HepB vaccine should be administered as the first dose for infants less than six weeks of age.		
Doses 2 ³ and 3 ⁴		
Mother's HBsAg Status	Vaccine Availability	Vaccination Strategy
The infant's mother is HBsAg positive or HBsAg status unknown ^{4,5}	You <u>have</u> monovalent HepB vaccine	Use monovalent HepB vaccine according to the recommended schedule for infants whose mothers are HBsAg positive, or HBsAg status unknown ²⁻⁵
	You <u>do not have</u> monovalent HepB vaccine; contact your state/local health department to assist with obtaining monovalent HepB vaccine	
The infant's mother is confirmed HBsAg negative	You <u>have</u> monovalent HepB vaccine	Use monovalent HepB vaccine according to the recommended schedule for infants whose mothers are confirmed HBsAg negative ²
	You <u>do not have</u> monovalent HepB vaccine	<p><u>Second dose</u> Obtain monovalent HepB vaccine and administer to the infant as <i>soon as possible</i>, according to the recommended schedule for infants whose mothers are confirmed HBsAg negative²</p> <p><u>Third dose</u> The third dose is recommended at between 6 and 18 months of age. Administer monovalent HepB vaccine as soon as possible, or by 18 months of age, whichever is sooner^{2,6}</p>

¹ For infants whose mothers are HBsAg positive, ensure that the dose of monovalent HepB vaccine and a dose of HBIG are administered within 12 hours of birth; for infants whose mothers are HBsAg status unknown, ensure that the dose of monovalent HepB vaccine is administered within 12 hours of birth.

² CDC. A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States. Recommendations of the Advisory Committee on Immunization Practices (ACIP). Part 1: Immunization of infants, children, and adolescents. MMWR 2005;54 (RR-16).

³ Monovalent HepB vaccine should be used for all HepB doses administered before six weeks of age.

⁴ Four doses of HepB vaccine (including the birth dose) are recommended for infants with birth weight <2000 grams whose mothers are HBsAg-positive. Monovalent HepB vaccine should be used for all HepB doses administered before six weeks of age. [Four doses of HepB vaccine (including the birth dose) are also permissible for infants and children when combination vaccines containing HepB (e.g., DTaP-HepB-IPV, Pediarix® or Hib-HepB, COMVAX®) are administered.]

⁵ Infants whose mothers are HBsAg positive or HBsAg status unknown must complete their HepB series by 6-8 months of age. Every effort should be made to obtain monovalent HepB vaccine to complete HepB vaccination according to the recommended schedule for these infants. In the event that monovalent HepB vaccine cannot be obtained before the dose is due, an age appropriate dose of any HepB-containing vaccine may be given.

⁶ Providers should maintain a list of infants and children with delayed or incomplete HepB vaccination series and recall these children to complete the HepB series when additional HepB-containing vaccine becomes available.

This document can be found on the cdc website at:

<http://www.cdc.gov/vaccines/vac-gen/shortages/downloads/eo-hib-hepb-cov.pdf>